

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

1. (Original) A compositionally graded sintered alloy which comprises: 1 to 40% by weight of an iron group metal; 0.1 to 10% by weight of at least one specific metal element selected from the group consisting of Cr, Au, Ge, Cu, Sn, Al, Ga, Ag, In, Mn and Pb; a hard phase containing, as a main component, at least one compound selected from the group consisting of a carbide, a nitride and a mutual solid solution of a metal (s) which belongs to Group 4 (Ti, Zr, Hf), 5 (V, Nb, Ta) or 6 (Cr, Mo, W) of the Periodic Table; and inevitable impurities, wherein the content of the specific metal element gradually increases from a surface of the sintered alloy toward an inner portion thereof, and a ratio of the average concentration of the specific metal element in a region which is at least 1 mm inside from the surface of the sintered alloy, to the average concentration of the specific metal element in a region between the surface and the position which is 0.1 mm inside the surface, of the sintered alloy, is 1.3 or more.

2. (Original) The compositionally graded sintered alloy according to Claim 1, wherein the specific metal element is at least one selected from the group consisting of Cr, Al and Mn.

3. (Original) The compositionally graded sintered alloy according to Claim 1, wherein the specific metal element is at least one selected from the group consisting of Au, Cu and Ag.

4. (Original) The compositionally graded sintered alloy according to Claim 1, wherein the specific metal element is at least one selected from the group consisting of Ge, Sn, Ga, In and Pb.

5. (Original) The compositionally graded sintered alloy according to Claim 1, wherein the ratio of the average concentration of the specific metal element in a region which is at least 1 mm inside from the surface of the sintered alloy, to the average concentration of

the specific metal element in a region between the surface and the position which is 0.1 mm inside the surface, of the sintered alloy is 2 to 20.

6. (Original) The compositionally graded sintered alloy according to Claim 1, wherein the content of the iron group metal gradually increases from a surface of the sintered alloy toward an inner portion thereof, and a ratio of the average concentration of the iron group metal in a region which is at least 1 mm inside from the surface of the sintered alloy, to the average concentration of the iron group metal in a region between the surface and the position which is 0.1 mm inside the surface, of the sintered alloy, is 1.1 or more.

7. (Original) The compositionally graded sintered alloy according to Claim 1, wherein the content of the specific metal element is 5 to 50% by weight based on the content of the iron group metal.

8. (Original) The compositionally graded sintered alloy according to Claim 1, wherein the hard phase comprises tungsten carbide, or tungsten carbide and a cubic system compound comprising at least one of compound selected from a carbide, a nitride and a mutual solid solution of a metal(s) which belongs to Group 4, 5 or 6 of the Periodic Table.

9. (Original) The compositionally graded sintered alloy according to Claim 1, wherein the hard phase comprises 30% by weight or more of at least one selected from the group consisting of a carbide, a nitride and a carbonitride of titanium, and the remainder being at least one selected from the group consisting of a carbide, a nitride and a carbonitride of a metal which belongs to Group 4, 5 or 6 of the Periodic Table, provided that titanium is excluded.

10. (Canceled)